

Type UMTS 250V UMF

Square Ceramic Surface Mount Time Lag Fuse

RoHS 6 Compliant



UMTS Series Fuse



Features

- Time Lag
- 250VAC Voltage Rating
- Wide range of current rating from 250mA to 6.3A
- Wide operating temperature range
- Tape and Reel for auto-insert SMD process.
- RoHS6 compliant
- Halogen Free 
- Leadfree 

Applications

- Lighting system
- LCD monitor
- Office electronic equipment
- Industrial equipment
- Medical equipment
- Power supply

HALOGEN FREE = LEAD FREE = 

Electrical Characteristics (Per IEC 60127-4)

Testing Current	Blow Time	
	Minimum	Maximum
125%	1 Hr.	N/A
200%	N/A	2 Min.
1000%	0.01 Sec	0.1 Sec

Safety Agent Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE	AMPERE RANGE / VOLT @ I.R.ABILITY
	E315341	250mA - 6.3A / 250V @150A AC and 350V @100A AC
		250mA - 6.3A / 250V @150A AC and 350V @100A AC

Physical Specifications

Materials	Body : Ceramic
	Terminations: Brass Caps, gold plated with nickel undercoating
Marking	On Fuse:
	" bel ", " T ", " Current Rating ", " L ", "250V", in black color,
	On label:
	"bel", "UMTS", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and  ,  (China RoHS compliant).

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bel

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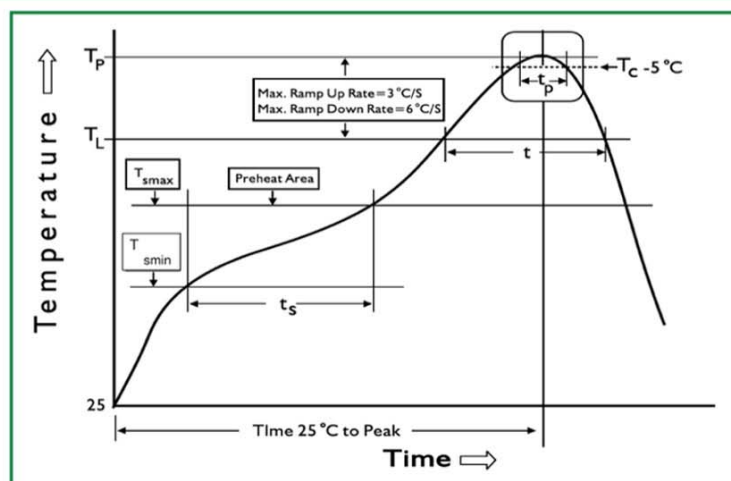
Electrical Specifications

Catalog Number	Ampere Rating (A)	Typical Cold Resistance (ohm)	Volt-drop @ 100% In (volt) Max.	Voltage Rating (V)	Interrupting Rating	Melting I ² T @ 10 In (A ² Sec)	Maximum Power Dissipation (W)	Agency Approvals	
								UL	CE
UMTS 250	250mA	0.78	0.314	250	250mA - 6.3A / 250V @150A AC and 350V @100A AC	0.26	0.12	Y	Y
UMTS 315	315mA	0.56	0.279	250		0.42	0.14	Y	Y
UMTS 400	400mA	0.35	0.248	250		0.67	0.16	Y	Y
UMTS 500	500mA	0.245	0.221	250		1.1	0.19	Y	Y
UMTS 630	630mA	0.180	0.197	250		1.7	0.21	Y	Y
UMTS 800	800mA	0.132	0.175	250		2.8	0.25	Y	Y
UMTS 1	1A	0.085	0.156	250		4.4	0.28	Y	Y
UMTS 1.25	1.25A	0.065	0.139	250		7.0	0.33	Y	Y
UMTS 1.6	1.6A	0.061	0.110	250		5.6	0.37	Y	Y
UMTS 2	2A	0.043	0.108	250		9.2	0.43	Y	Y
UMTS 2.5	2.5A	0.035	0.106	250		15	0.50	Y	Y
UMTS 3.15	3.15A	0.025	0.104	250		25	0.57	Y	Y
UMTS 4	4A	0.020	0.101	250		42	0.66	Y	Y
UMTS 5	5A	0.014	0.099	250		69	0.75	Y	Y
UMTS 6.3	6.3A	0.011	0.097	250		113	0.87	Y	Y

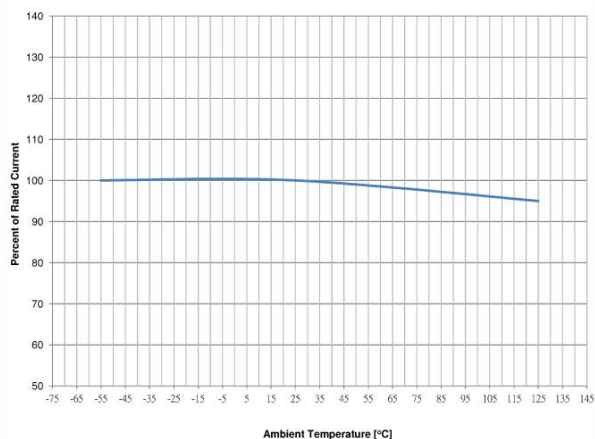
Consult manufacturer for other ratings

Soldering Parameters

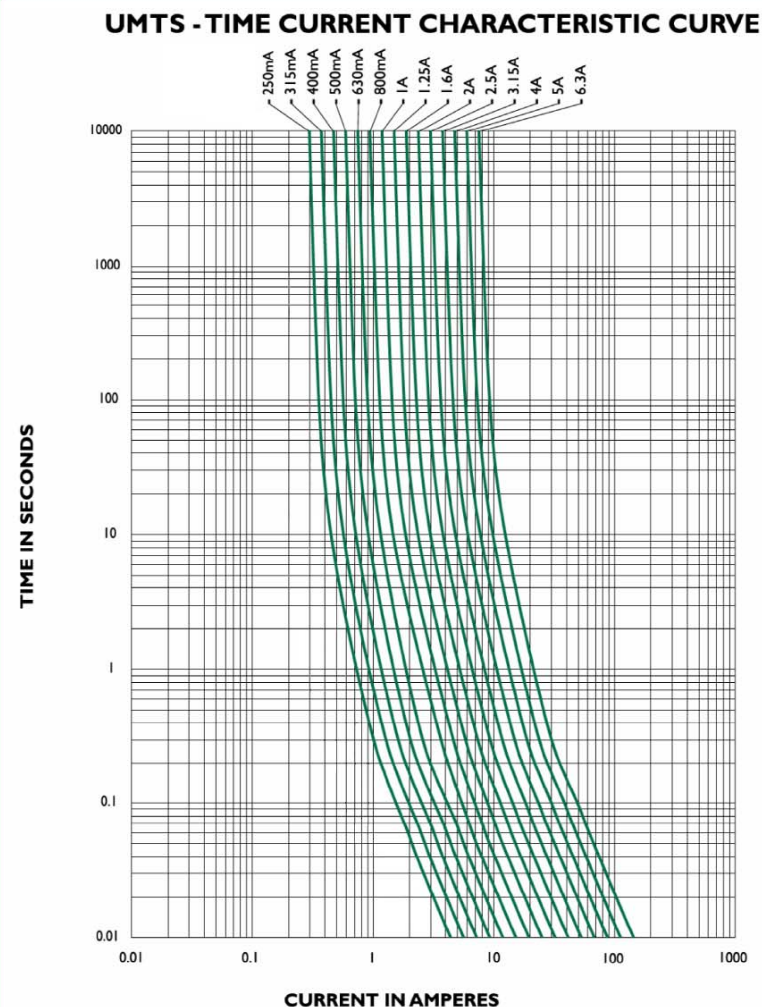
IR Reflow Profile	
Reflow Parameter	
Minimum preheat temperature(TsMIN)	130°C
Maximum preheat temperature(TsMAX)	170°C
Preheat Time	60-180 seconds
TsMAX to TL ramp-up rate	3°C / second max.
Time above temperature TL(tL)	200 °C 60-120 seconds
Peak Temperature (TP)	240 °C max.
Time Within 5σ of Peak TP	20 - 30 seconds
Ramp-down rate	6°C / second max.



Temperature Derating Curve



Average Time Current Curve



Environmental Specifications

Shock Resistance	MIL-STD-202G, Method 213B, Test Condition I (100 G's peak for 6 milliseconds; Sawtooth Waveform)
Vibration Resistance	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test condition B (48 hrs).
Insulation Resistance	MIL-STD-202G, Method 302, Test Condition B (After Opening) 0.1Mohms minimum.
Solderability	MIL-STD-202G, Method 208H
Resistance to solder Heat	MIL-STD-202G Method 210F, Test Condition J. (235 °C, 30 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65 °C to +125 °C).
Operating Temperature	-55 °C to +125 °C

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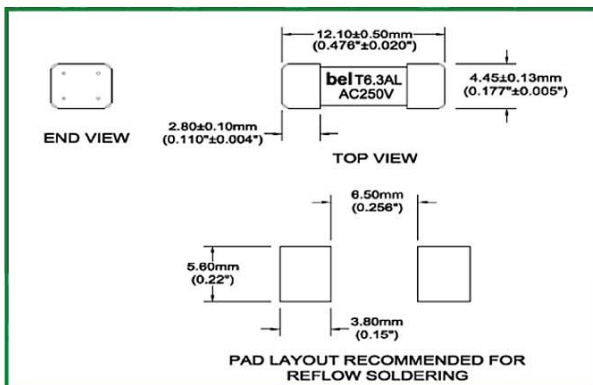
Fuse FGNO Explanation

06XX-[XXXX]-XX, [XXXX]=Ampere Rating

Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
1/32	.032	32	0032
1/25	.040	40	0040
1/20	.050	50	0050
1/16	.063	63	0063
8/100	.080	80	0080
1/10	.100	100	0100
1/8	.125	125	0125
15/100	.150	150	0150
	.160	160	0160
2/10	.200	200	0200
1/4	.250	250	0250
3/10	.300	300	0300
	.315	315	0315
3/8	.375	375	0375
4/10	.400	400	0400
1/2	.500	500	0500
6/10	.600	600	0600
	.630	630	0630
7/10	.700	700	0700
3/4	.750	750	0750
8/10	.800	800	0800

Fraction	Decimal	Amps	Bel FGNO[XXXX]
	1.0	1	1000
1-1/4	1.25	1.25	1250
1-1/2	1.50	1.5	1500
	1.60	1.6	1600
	2.0	2	2000
2-1/4	2.25	2.25	2250
2-1/2	2.5	2.5	2500
	3.0	3	3000
	3.15	3.15	3150
3-1/2	3.5	3.5	3500
	4.0	4	4000
	5.0	5	5000
	6.0	6	6000
	6.3	6.3	6300
	7.0	7	7000
7-1/2	7.5	7.5	7500
	8.0	8	8000
		10	9100
		12	9120
		15	9150
		20	9200
		25	9250
		30	9300

Mechanical Dimensions



Ordering Information

FUSE TYPE — 0683

AMPERE RATING — 0683 - XXXX - XX

Refer to fuse FGNO explanation table

QUANTITY & PACKAGING CODE — 01 = 1500 pcs with Tape and Reel

Packaging

Packaging Tape & Reel	Packaging Specification	Quantity	Quantity & Packaging Code
24 mm wide tape with 13 inches Diameter reel	EIA Standard 481-D	1500	01

Specifications Subject to change without notice.

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